

REMARKS

Claims 1-34 are pending. Claim 1 has been amended by deleting subject matter. No new matter has been added.

Claims 1-5 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheley et al., Biotechniques (1991) 10(6):731-732 ("Cheley"), cited in the IDS filed July 22, 2008, in view of Jacobson, Electrophoresis (1990) 11:46-52, cited in the IDS filed July 13, 2006. (July 8, 2009 Office Action, page 5)

Cheley's method is to immobilize protein on a membrane, and SDS is essentially used.

Jacobson teaches an electrophoretic transfer method that uses a transfer buffer comprising methanol and SDS to transfer proteins from a gel to various types of membranes. Claim 1 has been amended to delete the method for immobilizing a protein in the presence of a lower alcohol and a long chain alkyl sulfate. Therefore Jacobson has no relation to the invention now claimed.

Also, Jacobson indicates that the binding (of protein) to nitrocellulose was lower in the presence of SDS (p.47, right column, lines 17 to 18; Fig.2b; and p.49, right column lines 16 to 17, "...SDS reduces the binding to nitrocellulose.").

The rejection alleges in the Office action of July 08, 2009 that "... PVDF and nitrocellulose are equivalent materials for the same function,..." (Office action on July 08, 2009, p.11, lines 19-20). Thus, the skilled artisan would conclude that the binding of protein to PVDF membrane will be lower in the presence of SDS, too. That is, the skilled artisan would think that PVDF in the presence of SDS *would in fact cause a decrease in binding from the above disclosure in Jacobson*, even though "Jacobson does not indicate that PVDF in the presence of SDS would cause a decrease in binding," and even with PVDF's strong mechanical stability.

As is clear from above explanation, the immobilization of protein on the nitrocellulose membrane can not be performed well by Jacobson's method. SDS is not at all preferable for binding protein to a membrane as indicated in Jacobson. Because Jacobson teaches SDS reduces the binding to nitrocellulose, there is no logical motivation to combine Cheley with Jacobson.

As is clear from above explanation, rejection's allegation that Jacobson does not indicate that PVDF, in the presence of SDS, would cause a decrease in binding, is not correct. Further to combine Jacobson with Cheley's method is not logical and is simply a hindsight combination.

With the amendment to Claim 1, Jacobson has no relation to the invention now claimed.

It is respectfully requested that the rejection be reconsidered and withdrawn.

Claims 6-7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheley in view of Jacobson, as applied to claim 1. (July 8, 2009 Office Action, page 8)

For the same reasons explained above, there is no motivation to combine Jacobson with Cheley, and the claimed invention has the previously-described unexpected superior effect to the assumed combination of Cheley and Jacobson.

It is respectfully requested that this rejection be reconsidered and withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

Dated: February 22, 2010

Customer No. 21874

Respectfully submitted,

Electronic signature: /James E. Armstrong, IV/
James E. Armstrong, IV
Registration No.: 42,266
EDWARDS ANGELL PALMER & DODGE
LLP
P.O. Box 55874
Boston, Massachusetts 02205
(202) 478-7375
Attorneys/Agents For Applicant